# FINAL NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING SUMMARY

http://www.efdsw.navfac.navy.mil/environmental/AlamedaPoint.htm
Building 1, Suite 140, Community Conference Center
Alameda Point
Alameda, California

November 4, 2004

The following participants attended the meeting:

Co-Chairs:

Thomas Macchiarella Base Realignment and Closure Program Management Office West, Base

Realignment and Closure (BRAC) Environmental Coordinator (BEC),

Navy Co-chair

Jean Sweeney Restoration Advisory Board (RAB) Community Co-chair

Attendees:

Doug Biggs Alameda Point Collaborative (APC)

Neil Coe RAB

Anna-Marie Cook U.S. Environmental Protection Agency (EPA)

Nancy Cook Department of Toxic Substances Control (DTSC)

David Cooper EPA
Ardella Dailey RAB

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Tommie Jean Damrel Tetra Tech EM Inc. (Tetra Tech)

Doug Davenport Tetra Tech
Claudia Domingo SWDIV RPM

Jennifer Gibson Sullivan International Group, Inc.

Joyce Howell-Payne SWDIV

Judy Huang Regional Water Quality Control Board (RWQCB)

George Humphreys RAB

Elizabeth Johnson City of Alameda (City)

James D. Leach RAB

Marcia Liao DTSC

Lea Loizos RAB/ARC Ecology

Greg Lorton SWDIV Lead RPM

John McMillan Shaw Environmental and Infrastructure Inc. (Shaw)

Lona Pearson

Tetra Tech

Kevin Reilly

RAB

Michael Schmitz

**RAB** 

Dale Smith

RAB/Sierra Club

Jim Sweeney

RAB Vice Community Co-chair

Michael John Torrey

RAB/Housing Authority of the City of Alameda

The meeting agenda is provided in Attachment A.

#### **MEETING SUMMARY**

#### I. Approval of Minutes

Ms. Sweeney, Community Co-Chair, called the meeting to order at 6:34 p.m.

Mr. Sweeney asked for comments on the October 7, 2004 meeting minutes. Mr. Humphreys, Ms. Smith, and Mr. Torrey provided the comments summarized below.

#### Mr. Humphreys' Comments

• On page 6 of 11, fifth paragraph, last line, revise "there is more wells" to read, "there are more wells."

#### Ms. Smith's Comment

• On page 7 of 11, sixth paragraph, first line, revise "which is a flow diagram" to read, "which contain a flow diagram."

#### Mr. Torrey's Comment

• On page 3 of 11, top of page, third bullet, the title line "Ms. Torrey's Comment" should read "Mr. Torrey's Comment."

The minutes were approved based on incorporation of the comments summarized above.

#### II. Co-Chair Announcements

Ms. Sweeney provided a list of documents and regulatory comments that she had recently received and that are now available for review in the Information Repository:

- "In-Situ Chemical Oxidation Pilot Test IR [Installation Restoration] Site 9, October 12, 2004."
- "In-Situ Chemical Oxidation Pilot Test Plume 4-1 IR Site 4, October 18, 2004."
- "Final Groundwater FS [Feasibility Study] Site 25, October 20, 2004."

- Request by EPA for a 30-day extension on comments, dated October 13, 2004, for Site 25 soil draft FS. Comments will be submitted November 15, 2004.
- RWQCB comments dated October14, 2004, on Site 25 and Alameda Annex Site IR-02 draft groundwater FS.
- DTSC comments dated October 18, 2004, on the draft remedial investigation (RI) report for Operable Unit (OU) 1 IR Sites 6, 7, 8, and 16.
- RWOCB comments dated October 29, 2004, on draft RI work plan for IR Site 32.
- EPA review dated October 28, 2004, of the draft final groundwater RI/FS for OU 5 and Alameda Annex IR-02.
- Ms. Loizos comments dated October 29, 2004, on the draft final groundwater RI/FS Site 25 and Alameda Annex Site IR-02.
- EPA comments dated October 28, 2004, on the draft RI work plan for IR Site 32 Northern Ordinance Storage Area.
- EPA comments dated November 1, 2004, on the revised draft FS for IR Site 26.

Ms. Sweeney presented a brief overview of her review of the In-Situ Chemical Oxidation Pilot Test Plume 4-1 IR Site 4 report, prepared by Shaw. She stated that Shaw had some difficulties keeping the Fenton's reagent in the test wells but even with such problems the results of the pilot test were dramatic. This report concluded that in-situ remediation might not be cost-effective at IR Site 4 because of the difficulties. Ms. Sweeney presented several graphs depicting the results of the pilot study and noted that large differences in effects were observed. Ms. Sweeney stated that Ms. Cook's comments had noted problems with in-situ remediation at Hunters Point. Ms. Sweeney recommended that everyone read the documents.

Mr. Humphreys asked if these reports were also available in the library. Mr. Macchiarella stated that the Navy ensures that all documents are placed in the Information Repository. In addition, copies of all documents are provided to the Co-Chair and Ms. Loizos for their review and to share with others upon request.

Mr. Macchiarella provided the RAB with a list of upcoming significant Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) document submittals that are anticipated in November and December 2004. The list is included as Attachment B-1 to these minutes.

Mr. Macchiarella announced that the Information Repository has been relocated to Rooms 240 and 241. One room is devoted to Alameda Point and the second room contains documents for Alameda Annex, though the rooms are joined. Mr. Humphreys asked for clarification on the term Alameda Point. Mr. Macchiarella stated that the former Naval Air Station (NAS) Alameda is currently known as Alameda Point.

Mr. Macchiarella noted that the October RAB meeting included a discussion on whether to move the location of the December RAB meeting. Mr. Macchiarella stated that the City of Alameda is having a meeting that might be of interest to the RAB members on December 2, 2004. RAB members might want to move the RAB meeting to the City's meeting place or shortening the duration of the RAB meeting to attend both meetings. Ms. Johnson stated that the City of Alameda's meeting would be held at the Mastick Senior Center at 6:30 pm. Ms. Johnson stated that she was unable to change the schedule time for the City meeting. Ms. Johnson stated that the RAB could meet in a smaller room in the Mastick

Senior Center at 5:30 pm and then move to the larger meeting room at 6:30 for the City meeting. Ms. Sweeney noted that this move could attract new participants to the RAB meetings. Mr. Macchiarella noted that the agenda for the December RAB is usually light and may not provide the optimal introduction to the RAB meetings. Mr. Humphreys noted that signs would be necessary to direct members to the appropriate room at the senior center. Ms. Johnson stated that the Mastick Senior Center would contain many signs to provide adequate directions to the meeting room. Mr. Torrey noted that a sign with directions to the new meeting location should be placed at Building 1. Ms. Sweeney asked for a motion to change the meeting time and location for the December RAB meeting and the motion passed.

Mr. Reilly asked if the agenda had been set for the December RAB meeting. Ms. Sweeney noted that the final approval of the minutes was scheduled for the December meeting. Mr. Macchiarella added that the Co-Chair vote and the approval of the RAB rules would also take place during the December meeting but the agenda would be kept light.

#### III. Discussion of Proposed RAB Rules in Preparation for December Vote

Ms. Sweeney stated that the draft RAB Rules had been sent to the RAB members for review. The RAB discussed the wording thoroughly and suggested several changes. Mr. Macchiarella will incorporate these changes and then distribute the revised RAB Rules to the RAB members prior to a vote, which will take place at the December RAB meeting.

The RAB mission statement for NAS Alameda was not included in the packet; however Mr. Torrey distributed several copies to members at the beginning of this meeting. Ms. Sweeney read aloud the RAB mission statement. The RAB discussed if changes to the wording of the mission statement should be made but concluded the current wording was appropriate.

#### IV. BRAC Closure Team Activities

Ms. Liao presented an update of BRAC Closure Team (BCT) activities from the previous month. A handout was provided and is included in Attachment B-2. Ms. Cook stated that in addition to the regular monthly BCT meeting, the BCT had also met to discuss the Economic Development Conveyance (EDC)-5 Site Investigation (SI). Ms. Liao summarized each of the agenda items discussed.

- The Proposed Plan for Site 15 has been delayed due to agency concerns for elevated polycyclic aromatic hydrocarbons (PAH) north of the fence line near the Oakland Inner Harbor. The agencies have requested that either institutional controls (ICs) be implemented or additional sampling be performed. Because the City prefers not to use ICs, the Navy has agreed to take additional samples. Mr. Schmidt asked if funding was available for the sampling. Mr. Macchiarella replied that although the Navy does not want to delay the Proposed Plan schedule, additional sampling at Site 15 was not included in the fiscal year 2005 budget so the Proposed Plan schedule will be delayed. The Navy will work to find the funding for this project.
- The Site 25 groundwater RI/FS went final in October. Data gaps were identified, but because activities conducted by Catellus will affect the groundwater plume, the Navy will address these gaps in the Remedial Design phase. The agencies also have additional concerns related to soil gas at the site from the benzene plume that extends to the school and to Alameda Annex. Hot spots are located in IR-02 (Alameda Annex) and the plume boundary is close to the College of Alameda. Modeling will be performed to estimate risk levels. It must be determined whether to use soil gas or groundwater data for the modeling.

Ms. Smith asked if the historic watercourse channels of the marshes were conduits for transport of contamination. Ms. Huang stated that she had not studied the channels for this particular site. Ms. Huang noted that the concerns regarding the groundwater plume would be addressed following the completion of Catellus activities. Mr. Schmitz inquired about the funding for this task. Mr. Macchiarella noted that this project would be funded with subsequent phases of the CERCLA program for the site.

The draft soil FS is currently being reviewed by the agencies. The Navy intends to combine the risk results of the soil FS and the groundwater FS into one document.

- The BCT discussed the current active documents scheduled in the site management plan (SMP). In addition to the documents listed in the handout (Attachment B-2), approximately 10 Proposed Plans will be due in the next year and include: Site 28 (Skeet Range), Site 14 (Fire training area), OU-5 (Site 25), Site 26 (Western Hangar zone), Site 17 (Seaplane Lagoon), OU-1 (Sites 6, 7, 8, and 16), Site 30, OU-3 (Site 1), OU-2A, and OU-2B. Mr. Macchiarella noted that some of these are already funded for fiscal year 2005 and some will be funded in fiscal year 2006.
- The BCT discussed the path forward for EDC-5. Agencies prefer to base parcel evaluation decisions on the actual chemical sampling and past activities at the site instead of using risk screening numbers. The agencies will provide the Navy with a list of parcels that require further evaluation. Ms. Dailey asked if the Navy had identified parcels requiring further evaluation and if the agencies needed to approve that list. Ms. Liao confirmed this and noted that the agencies would utilize the results of sampling activities in their decision.

#### V. RAB Community Co-Chair Nominations in Preparation for December Vote

Ms. Sweeney asked for nominations for the RAB Community Co-Chair position. Mr. Torrey nominated Mr. Schmitz. Ms. Smith nominated Mr. and Ms. Sweeney for the Co-Chair and Vice Co-Chair positions. Mr. Schmitz stated that he was uncertain if he would be able to provide the time necessary for the Co-Chair position.

Ms. Sweeney stated that the vote would take place at the December RAB meeting.

#### VI. Petroleum Program Update

Ms. Sweeney introduced Mr. Lorton to present an update to the Petroleum Program. A handout was provided and is included as Attachment B-3. He stated that since the last Petroleum Program update in April 2004, the petroleum sites have not changed very much and that active remediation in various stages is still taking place. Mr. Lorton acknowledged and introduced Mr. McMillan of Shaw who is the project manager for many of the petroleum remediation sites.

Mr. Lorton presented the sites with current corrective action activities. These sites include (Slide 2):

- Jet fuel removal near Building 397 (in Corrective Action Area [CAA] 13)
- Jet fuel removal at Parcel 37 (CAA 6)
- Gasoline removal at Site 7 (CAA 7)
- Jet fuel removal near Building 530 (in CAA 13)
- Dissolved-phase fuel cleanup at Area 37 (in CAA 11)
- Gasoline removal at Site 22 (CAA 4C)

The Navy is performing investigations for free product at CAA-3 and CAA-5. The concentrations of contaminants detected at these two sites suggested the presence of free product. Subsequent investigations have confirmed that free product is present at the sites, and the Navy is currently trying to determine its extent. It is believed that the area of free product is smaller and more confined than the contamination in the six areas listed above.

The Navy is also planning a jet fuel removal at Building 410 (Site 9). Mr. Lorton noted that these activities only address contamination from petroleum products. Any CERCLA contaminants, including chlorinated solvents, will be addressed under the CERCLA program. Mr. Lorton showed a figure presenting the locations of the CAAs (Slide 3).

The corrective action process used is called dual vacuum extraction (DVE). Mr. Lorton presented an overview of this process (Slide 4). Wells are placed in the ground and slotted at the interface between the groundwater and the vadose zone. Fuel product tends to accumulate in this area. Horizontal wells were used in CAA-6 and CAA-7; vertical wells were used in all locations. DVE works by creating a vacuum to suck the free product into the wells and from there into a knock-out drum. The knock-out drum allows for the separation of the air vapors and the liquid. The liquid contains a mixture of groundwater and fuel. This mixture is separated in an oil-water separator. The water is then transferred to liquid-phase activated carbon, which removes the remaining fuel constituents. This water is discharged to the sewer system. The vapor from the knock-out drum goes through vapor-phase activated carbon, where the hydrocarbons are removed by absorption.

The Navy is considering an alternative system that replaces the vapor-phase activated carbon with a catalytic oxidizer (Slide 5). Mr. Lorton noted that the sites previously treated with DVE were remediated for jet fuel and as a result, high concentrations of contaminants were not found in the vapor. Site 22 (CAA-4C), a former gas station, does have high concentrations of gasoline in the vapor. As a result, a large quantity of vapor-phase activated carbon is being used, which is very expensive. The use of the catalytic oxidizer system at CAA-4C could be more cost-efficient. The Navy is in the process of obtaining permits from the Bay Area Air Quality Management District to use the catalytic system.

Ms. Smith asked if the recovered fuel could be reused. Mr. Lorton responded that it can be burned and is used as industrial boiler fuel. Mr. Humphreys asked if natural gas was used for the system. Mr. Lorton stated that propane would be used if there were not enough gasoline to sustain a combustion reaction. Mr. Lorton stated that because the motivation to change to the catalytic system is economical, the cost of the propane would be included in this decision. Ms. Smith asked if there was any heat recovery from the burning of the fuel. Mr. Lorton responded that this heat was lost. The catalytic oxidizer burns at approximately 600 degrees Fahrenheit (°F) and there is not a lot of heat to be recovered from this low temperature.

Biosparging is currently being used at several sites. Mr. Lorton noted that the RAB had previously discussed the use of biosparging in groundwater at Site 25. Biosparging has been successful at CAA-11 (Area 37). Mr. Lorton presented an overview of the biosparging process (Slide 6). Air is injected in the groundwater to convert an anaerobic (oxygen-deficient) environment to an aerobic environment. This allows the existing microbes to convert fuel to carbon dioxide and water. Mr. Lorton stated that the microbes consume oxygen as they degrade the contaminants in the plume, and that they will consume all the oxygen before the contaminants can be degraded if the plume is concentrated, unless oxygen is added. Mr. Lorton noted that only a small amount of air is injected into the soil.

Mr. Schmitz asked what the typical timeframe is for this process. Mr. Lorton responded that the process takes several years, depending on the volatility of the contaminants. Mr. McMillan stated that

biosparging has been operating at CAA-11 for about 10 months. Mr. Lorton noted that they were seeing decreases in concentration at this site. The concentrations will fluctuate over time. For example, the rain will dilute the concentration levels but these will rebound when the grounds dries.

Ms. Smith asked if the plume had reached Seaplane Lagoon. Mr. Lorton responded that the Navy suspects it has. Contaminants have been detected along the road that borders the lagoon. Mr. Lorton noted that an old fuel line ran along the road. Mr. McMillan noted that an extensive set of wells were placed in that area. All wells were showing detections of contaminants below 1 milligram per liter.

Mr. Lorton stated that the first system to come online began about two years ago at Building 397 (Slide 7). This was the site of the jet engine test cells in CAA-13. The removal of free product at this building is complete. Groundwater continues to be monitored based on ecological risk criteria and maximum contaminant levels (MCL). Mr. Lorton noted that over 1,200 pounds of jet fuel were removed from this site. Ms. Sweeney asked what was done with this fuel. Mr. Lorton stated that it was contained on the carbon and was sent to the carbon manufacturer for regeneration. The carbon is regenerated for reuse after the fuel is burned off.

Mr. Lorton discussed Site 7, the Navy exchange gas station (Slide 8). The free product removal system at this site operated from May 2002 to September 2003, and began treating vapor from air sparging in June 2002. Approximately 9,900 pounds of gasoline have been removed. Underground fuel lines were recently discovered that were originally believed to have been removed in 1998 with the underground storage tanks. These fuel lines are suspected to be the source for residual contamination. The fuel lines are scheduled for removal in the following week.

Parcel 37 (CAA-6) operated as a fuel storage area until 1997 (Slide 9). This remedial system operated from March 2002 through September 2003. Free product remains in a few isolated areas at this site. These areas are being dealt with on a spot removal basis. The amounts currently being removed are very small compared to previous amounts. A total of 5,300 pounds of fuel have been removed. Biosparging is currently occurring at the site.

Building 530 located in CAA-13 was used as an area for draining fuel out of aircraft prior to maintenance (Slide 10). It is suspected that the collection system under the paved area had leaks. Approximately 55,800 pounds of fuel have been removed, which includes 39,600 pounds of free product. The fuel recovery has diminished since December. Biosparging is currently ongoing at the site in selected wells to address contamination in groundwater. This system is linked to the system at Building 397.

The most recent installation of a free product removal system occurred at Site 22 (CAA 4C) (Slide 11). The DVE well field was constructed and connected to the Building 397 treatment system. Operations began in June 2004 and 6,900 pounds of gasoline have been removed. Mr. Lorton noted that a knock-out drum and pipes are visible at the site.

Mr. Lorton also discussed Area 37 (CAA 11). Twenty-four underground tanks were used to store a variety of petroleum products and wastes in this area. Four separate groundwater plume areas have been identified and an oily material (a lubricant) had been found floating on groundwater in a confined area. Dissolve phase contamination has been found in the groundwater. A biosparging system began operations at this site in March 2003. Mr. Humphreys asked if this site was near the OU-2B plume and whether methods were in place to ensure separation of this plume from the petroleum plumes. Mr. Lorton noted that the chlorinated plume is located deeper. The Navy is careful to only address the shallow contamination in the petroleum plume.

Mr. Lorton presented a graph showing the total amount of total petroleum hydrocarbons (TPH) removed at the DVE sites (Slide 11). Mr. Lorton noted that additional amounts of contaminants might have been naturally attenuated at these sites. Mr. Lorton noted that Parcel 37 was operated in several stages. The system would remove all available fuel, but then additional fuel would reappear after the some time. Mr. Lorton noted that the daily recovery rate for CAA 4C is somewhat variable as this system is turned off on the weekends. Mr. McMillan stated that this system is turned off to ensure pubic safety, as the main contaminant in the pipelines is gasoline. Contractors monitor the site during the week to ensure that the concentrations do not exceed the lower explosive limit (LEL).

Mr. Lorton presented a second graph that included Building 530 (Slide 12). A total of almost 40 tons of product has been removed from all sites. Ms. Huang noted that this amount could provide enough fuel for 13 airline flights to San Diego.

Ms. Dailey asked where the fuel was located in the ground. Mr. Lorton responded that if a drum of gasoline were dumped on the ground, the gasoline would sink and float on the water table. A small amount of gasoline would dissolve into the water. As long as air is available, bacteria will consume it; however, this degradation process only occurs at the edges. Researchers at Lawrence Livermore Laboratory determined that a plume spreads out and then stabilizes. Because DVE draws air, this process aids in the remediation of the vadose zone and aerates the water. Free product is also being removed, which is a continuing source of groundwater contamination.

Ms. Sweeney asked for clarification that although the remediation for petroleum contamination may be completed, other contaminants could still be present at the site. Mr. Lorton stated that the goal for the groundwater is to achieve standards for either drinking water or ecological risk. Ms. Huang noted that this program address petroleum contamination only. If other contaminants are present at the site, these will also need to be addressed under the CERCLA Program.

#### VII. Community and RAB Comment Period

Mr. Schmitz stated that Congress was scheduled for a lame duck session on November 16, 2004. He noted that Congress had failed to provide adequate funding for environmental cleanup activities and stressed the importance of asking Congress, as well as the Navy, to fully fund the environmental cleanup. Mr. Schmitz asked Mr. Macchiarella to revisit this item based on the importance of funding for environmental remediation and noted that the RAB members should also request this of their representatives. Mr. Macchiarella responded that he would bring this concern to the Navy.

Ms. Loizos stated that she had copies of the focus group comments on the groundwater report for IR Site 25 and IR-02. These comments had previously been emailed to the RAB members.

Ms. Sweeney stated that she receives comments by email and asked if the RAB members would like them forwarded. The RAB agreed to this idea. Ms. Sweeney stated that she could also notify RAB members when new documents come out.

Mr. Biggs requested that a copy of the final SI report for EDC-5 be sent to the Alameda Point Collaborative in addition to the Information Repository. Mr. Biggs noted a delay in getting documents to the library for public review and requested that this be expedited in the future. Mr. Biggs thanked the Navy and Shaw for responding quickly to an inquiry about CAA-7.

There were no further comments. The meeting was adjourned at 8:55 p.m.

#### ATTACHMENT A

#### NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING AGENDA November 4, 2004

(One Page)

### RESTORATION ADVISORY BOARD

### NAVAL AIR STATION, ALAMEDA AGENDA

NOVEMBER 4, 2004 6:30 PM

#### ALAMEDA POINT – BUILDING 1 – SUITE 140 COMMUNITY CONFERENCE ROOM

(FROM PARKING LOT ON W MIDWAY AVE, ENTER THROUGH MIDDLE WING)

TIME	<b>SUBJECT</b>	PRESENTER
6:30 - 6:45	Approval of Minutes	Jean Sweeney
6:45 - 7:00	Co-Chair Announcements	Co-Chairs
7:00 – 7:25	Discussion of proposed RAB Rules in preparation for December vote	Co-Chairs
7:25 – 7:45	RAB Community Co-Chair Nominations in preparation for December vote	Jean Sweeney
7:45 – 8:05	Petroleum Program Update	Greg Lorton
8:05 – 8:15	BCT Activities	Marcia Liao
8:15 - 8:30	Community & RAB Comment Period	Community & RAB
8:30	RAB Meeting Adjournment	

#### ATTACHMENT B

### NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS

- B-1 List of significant Navy CERCLA program documents for November and December 2004, presented by Thomas Macchiarella, SWDIV. November 4, 2004. (1 page)
- B-2 October 2004 BCT activities update. Presented by Marcia Liao, DTSC. November 4, 2004. (1 page)
- B-3 Petroleum Program Update. Presented by Greg Lorton, SWDIV. November 4, 2004. (7 pages)

# ATTACHMENT B-1 LIST OF UPCOMING CERCLA DOCUMENTS FOR NOVEMBER/DECEMBER 2004

(One Page)

#### Alameda Point Restoration Advisory Board Meeting November 4, 2004

#### Significant Navy CERCLA program documents planned for <u>November/December 2004</u>

- Site 17 (Seaplane Lagoon) Draft Feasibility Study Report
- Draft Feasibility Study Report for OU-1 (Sites 6, 7, 8, and 16)
- Site 13 (Former Oil Refinery) Final Action Memo for Time Critical Removal Action
- Site 2 (West Beach Landfill) Draft Final RI Workplan
- Site 28 (Todd Shipyard) Draft FS Report
- EDC-5 Draft Final Site Inspection Report
- Site 9 Project Report (for the intermediate zone pilot study)
- Site 14 (Former Fire Training Area) FS Addendum
- OU-2A Draft Final RI Report
- Site 29 (Skeet Range) Proposed Plan
- Site 32 (Northwestern Ordnance Storage Area) Draft Final RI Workplan

# ATTACHMENT B-2 BCT ACTIVITIES UPDATE (One Page)

#### ALAMEDA POINT BCT UPDATES OCTOBER 2004

Meetings/Conference Calls: 10/19 Monthly BCT Meeting

10/19 EDC-5 SI

#### Site 15

Site 15 Proposed Plan has been delayed due to elevated PAHs north of the fence line. Agencies have requested further sampling unless Institutional Control (IC) is put in place. Since the City prefers no IC, Navy has agreed further sampling.

#### Site 25

Site 25 groundwater RI/FS has gone final. Data gaps have been identified in the RI/FS and will be addressed in the Remedial Design phase by the Navy after the Catellus development activities are completed. DTSC's additional concerns will be addressed by the Navy outside of the final RI/FS document, perhaps in the Proposed Plan and the ROD.

Draft Site 25 soil FS is under agency review. Currently the risk estimates for soils and groundwater are reported separately. The Navy intends to combine them in the draft final soil FS document.

#### **SMP**

#### Active documents:

- Documents to be submitted: OU-1 draft FS, Site 17 draft FS, Site 29 draft PP
- Agency comments to be responded: Site 2 draft RI workplan
- Agency review to be completed: Site 26 draft FS, Site 32 draft RI workplan, Site 25 soil draft FS, EDC-5 SI, Offshore sediment sampling plan

#### EDC-5

Agencies prefer to base parcel evaluation more on past activities and sampling results and less so on risk screening numbers. Agencies will provide the Navy with the list of parcels that need further evaluation. Agency's review will base on the 2001 Environmental Baseline Survey (EBS) report and its precursor, Parcel Evaluation Plan (PEP) of 1994.

# ATTACHMENT B-3 PETROLEUM PROGRAM UPDATE

(7 Pages)



#### **Alameda Point**

**BRAC** 

Program Management Office West

### **Petroleum Program Update**

Greg Lorton, P.E.
Lead RPM
Alameda Point BRAC Team

November 4, 2004

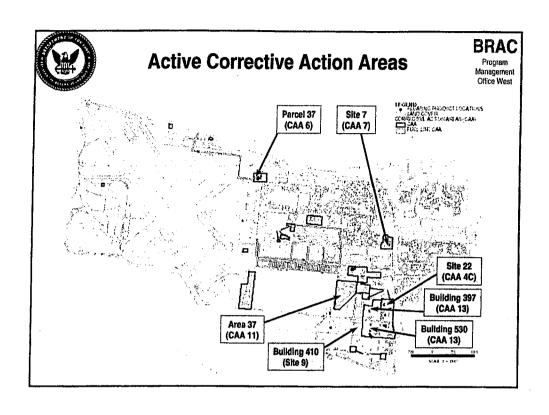


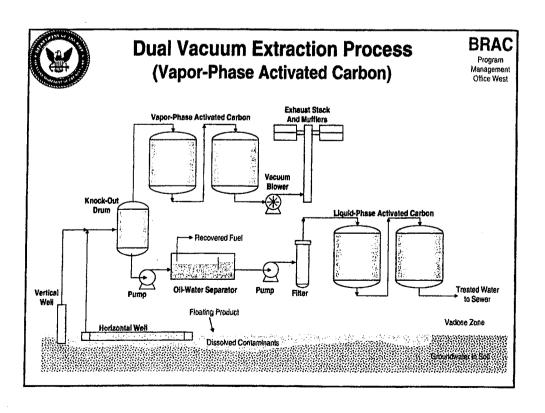
### **Corrective Action Update**

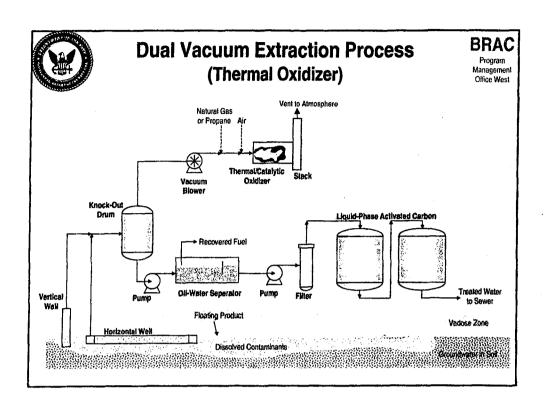
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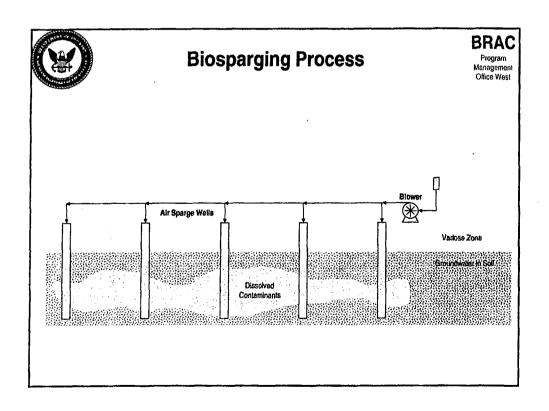
Program
Managemen

- · Corrective actions currently in operation
  - Jet fuel removal near Building 397 (in CAA 13)
  - Jet fuel removal at Parcel 37 (CAA 6)
  - Gasoline removal at Site 7 (CAA 7)
  - Jet fuel removal near Building 530 (in CAA 13)
  - Dissolved-phase fuel cleanup at Area 37 (in CAA 11)
  - Gasoline removal at Site 22 (CAA 4C)
- Additional investigations for free product at CAA-3 and CAA-5.
- Jet fuel removal currently in planning at Building 410 (Site 9).
- Sites with significant commingled CERCLA contaminants are handled in the CERCLA program.











## **Building 397**Jet Engine Test Cells (in CAA 13)

BRAC
Program
Management
Office West

- Original jet fuel spill in 1992.
- Although several excavations and storm drain removals followed over the next several years, floating product was found near the building in 2000.
- A Dual Vacuum Extraction system was constructed directly east of Building 397 in late 2001 and early 2002.
- DVE operation began in March 2002 and concluded in March 2004.
- Approximately 1,200 pounds of jet fuel have been removed.
- The treatment system also currently handles vapor, free product, and groundwater from the well field at Building 530 and CAA 4C.



# Site 7 Navy Exchange Gas Station (CAA 7)

BRAC
Program
Management

- Gasoline free product and groundwater contamination is present at the site. MTBE is present in the groundwater, but the MTBE plume is relatively limited.
- · The tanks were removed in 1998.
- A DVE system was constructed and operated from May 2002 to September 2003. The system began treating vapor from air sparging of groundwater in June 2002.
- Approximately 9,900 pounds of gasoline have been removed.
- Underground fuel lines were recently found that were originally believed to have been removed in 1998.
- Removal of the fuel lines were scheduled to be removed this week.



### Parcel 37 Aircraft Fuel Storage Area (CAA 6)

Program Management

- Operated as a fuel storage area until 1997.
- Jet fuel free product remained (up to 1 foot), in spite of an excavation and tank/piping removal in 1998-1999.
- A DVE system was constructed for free-product removal. Operation began in March 2002 and concluded in September 2003.
- · Spot removals have targeted wells with sporadic free product.
- As of October 2004, approximately 5,300 pounds of jet fuel have been removed.
- Biosparging is now underway at the site.



## Building 530 Aircraft Defueling Area (in CAA 13)

**BRAC** 

Program Managemen

- The lot west of Building 530 was used as an area for draining fuel out of aircraft prior to maintenance.
- Fuel apparently leaked out of the collection system into the underlying soil.
- The free-product well field was connected into the Building 397 DVE treatment system and started operation in late October 2002.
- Approximately 55,800 pounds of fuel (primarily jet fuel) have been removed, of which 39,600 pounds have been free product. Free product recovery has diminished since December.
- Biosparging of groundwater has begun in selected wells.



# Site 22 Former Service Station (CAA 4C)

**BRAC** 

Program Management Office West

- The service station at Main Street and Pacific Avenue was operated before the NEX service station at Site 7 (CAA 7).
- The tanks were removed in 1994.
- Gasoline constituents have been identified in the soil, groundwater, and as free product.
- The DVE well field was constructed and connected to the Building 397 treatment system. Operation began in June 2004, and as of October 22, approximately 6,900 pounds of gasoline have been removed from the site.

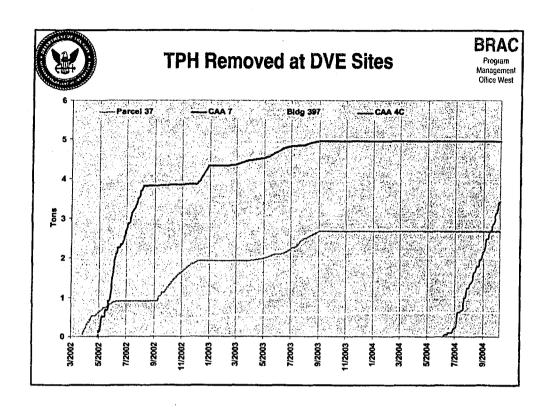


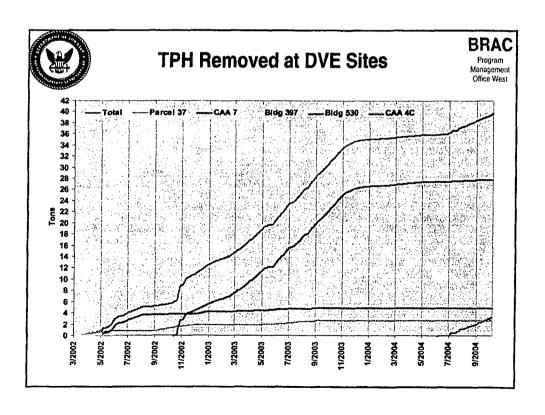
## Area 37 Fuel Storage Area (in CAA 11)

BRAC

Program Management

- 24 underground tanks were used to store a variety of petroleum products and wastes.
- The tanks were removed in 1998.
- Four separate groundwater plume areas have been identified.
- A biosparging treatment system began operation in mid-March 2003.
   Biosparging relies on pumping a low flow rate of air into the soil and groundwater to create aerobic conditions so that natural bacteria will break down the contaminants.
- A separate small free-product area is being treated using vacuum extraction southwest of Building 14.





### SulTech

A Joint Venture of Sullivan Consulting Group and Tetra Tech EM Inc.

TRANSMITTAL/DELIVERABLE RECEIPT				
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TO: Contracting Officer Karen Rooney, Code 02F Naval Facilities Engineer Southwest Division 1230 Columbia Street, Su	ring Command LOCATION Alameda Pouite 870	12/10/04 010 N: point, Alameda, California		
FROM:  Sph Vieto CA 92101-8:  Michael Wanta	, Contract Manager			
DOCUMENT TITLE AND DATE:  November 4, 2004 Restoration Advances.	visory Board Monthly Meeting Mi	nutes		
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